

Support and Sabotage

Principals' Influence on Middle School Teachers' Responses to Differentiation

Holly L. Hertberg-Davis

Catherine M. Brighton

The University of Virginia

In order to respond to the growing academic diversity in classrooms, teachers must recognize that their students have different needs and commit to differentiating instruction accordingly; however, the relationship between teachers' willingness and ability to differentiate instruction and principals' attitudes toward differentiation is unknown. In this qualitative study, the principals and faculty at three schools were interviewed and observed over the course of 3 years. The results suggested that principals played a key role in teachers' willingness and ability to differentiate instruction. Principals successful in encouraging teachers to differentiate exhibited the critical support, desire for change, belief that change was possible, and long-term vision of implementation that teachers required in order to effectively differentiate in their classrooms.

Tremendous diversity exists among adolescent learners in middle schools. Within any middle school classroom, there is likely great variability from child to child in terms of appearance, physical and cognitive development, social maturity, and behaviors (George & Alexander, 1993). Consequently, more than at any other school level, teachers in heterogeneous middle school classrooms are faced with a wide range of students' developmental, social, psychological, and cognitive needs, beliefs about school, and expectations for their learning experiences (Eccles & Wigfield, 1997; Fletcher, Bos, & Johnson, 1999).

The unpredictability and irregularity of cognitive, social, and physical growth in young adolescents present educators with the formidable challenge of providing appropriate learning experiences for this highly diverse groups of students. However, in recent years, the detracking movement, the push for inclusion, and the nation's changing demographics have further expanded the range of students learning together in the same classroom (Fletcher et al., 1999). The typical public school classroom

contains 27 children whose academic performance levels typically span more than five grade levels (Jenkins et al., 1992; National Center for Education Statistics, 1996).

Review of the Literature

Serving Gifted Students in the Diverse Middle School

Historically, the debate over how to address appropriately the academic diversity in middle schools has centered on methods of grouping students. For much of the contentious history of gifted education and the middle school movement, middle school educators have opposed homogeneous grouping of students as vehemently as gifted educators have advocated for it (Allan, 1991; Kulik & Kulik, 1992; Oakes, 1985; Rogers, 1993; Slavin, 1990; Tomlinson, 1995). The recent joint position statement from the National Middle School Association (NMSA) and the National Association for Gifted Children (NAGC) advocated for a "continuum of services including differentiated instruction, advanced

classes, acceleration, short-term seminars, independent studies, mentorships, and other learning opportunities matched to the varied needs of high-potential and high-ability learners” and noted that district and school leaders should “ensure that teachers have meaningful knowledge and understanding of gifted adolescents, including training in differentiated instruction so that the needs of all students—including those with advanced performance or potential—are appropriately addressed” (NMSA/NAGC, 2005, n.p.). Differentiation, according to Tomlinson (2001), is the teacher’s curricular, instructional, or assessment responses to students’ differing academic readiness, interests about the identified learning goals, and preferred processing modes or conditions. Despite these recommendations for training in differentiated instruction, traditional instructional strategies such as lecture, drill-and-practice, heterogeneous cooperative learning groups, and direct instruction still prevail in middle grade classrooms (McEwin, Dickinson, & Jenkins, 1996; Moon, Brighton, & Callahan, 2003; Moon, Callahan, Tomlinson, & Miller, 2002; Moon, Tomlinson, & Callahan, 1995; Pate, Homestead, & McGinnis, 1997).

Changing Classroom Practices to Respond to Learners’ Needs

In order to actualize the recommendations from the joint position statement of NMSA and NAGC to make the heterogeneous middle school classroom an appropriate setting for gifted adolescent learners, middle school teachers first need to recognize that the students have a continuum of academic needs and then shift their instructional practices accordingly to respond to these learners’ needs. In short, teachers need to recognize the need for and commit to changing their typical instructional behaviors. Change literature suggests that both internal and external challenges to the change process may inhibit and support middle school teachers in making these recommended changes to their instructional practices (Steiner, 2000).

One line of thinking in the change literature proposes the necessity of changing the individual teachers in an attempt to change the larger school organization (Bandura, 1977; Berliner, 1988; Hall, 1985). A contradictory line of research proposes the importance of changing the organization and the culture of the school as a necessary precursor to changing the teachers within the organization (Elmore, Peterson, & McCarthy, 1996; Moon et al., 2004; Tyack & Cuban, 1995). Regardless, virtually all change theorists agree that (a) change is complex and multifaceted (Fullan, 1991, 1993); (b) systemic and sustained change requires extended time for realization, implementation, and actual-

ization (Fullan, 1991; Steiner, 2000; Tyack & Cuban); and (c) change can be positively and negatively affected by specific factors (Fullan, 1991, 1993; Gold, 1999; Steiner).

Factors That Support and Inhibit Teachers’ Change

Specifically considering the context of changing practices to differentiate curriculum, instruction, and assessment, research suggests that factors internal to the teacher, such as conflicting beliefs about the meaning of differentiation and the nature of schooling, insufficient depth of content knowledge, and shallow pedagogical understandings, may inhibit a teacher’s willingness and ability to differentiate instruction to meet learners’ diverse academic needs (Brighton, Hertberg, Callahan, Tomlinson, & Moon, 2005; Brighton, 2001; Hertberg, 2003).

While effective school leadership is widely accepted as an important consideration in school reform and change, there is no consensus on the characteristics of an effective leader. In a review of the research literature on scaling up change initiatives in education, Steiner (2000) summarized five leader behaviors and attributes that positively influence educational organizations’ change efforts. Theorists suggest that effective leaders (a) demonstrate the ability to communicate the goals of the initiative clearly and concisely to stakeholders, (b) champion a small number of specific goals versus lengthy laundry lists of outcomes, (c) set high standards for teaching and learning, (d) simultaneously communicate an expectation for change with necessary support, and (e) share some decision-making powers with teachers (Steiner).

This study sought to examine the influence of a key external factor, the building administrator, in middle school teachers’ willingness and ability to address systematically the needs of all learners, including the gifted, in diverse middle school classrooms. The specific research question that guided this study was: What characteristics of principals positively and negatively impact teachers’ willingness and ability to differentiate instruction for all learners, including the gifted, in heterogeneous middle school classrooms?

Methodology

Conceptual Framework

The theoretical framework that guided this study was based on the tenets of interpretive sociology, specifically Bloomer’s (2001) interpretation of symbolic interactionism. Symbolic interactionism is the process by which the

meanings of shared experiences, such as the change journey, are conveyed, interpreted, and acted upon by participants. The purpose of this study was to understand the characteristics and attributes of middle school principals in whose schools teachers were learning how to implement differentiation as a method for appropriately challenging all students, including the gifted, in order to inform policy and guide practice in the middle grades. The study's primary interests were: (a) the interactions between the teachers and principals, (b) the meanings each assigned to the change process, and (c) teacher and principal perceptions of themselves as teachers and administrators involved in the change process.

Context of the Study

This study of principals was part of a larger study that examined the impact of differentiation on student achievement, students' attitudes about learning, and teachers' instructional practices (Brighton, et al., 2005). Data collection for the larger study took place between 1997–2000 in nine schools nested in three school districts in three states—Texas, Virginia, and Maryland—that represented three different levels of state testing accountability at the time of data collection (high stakes, medium stakes, and low stakes). In the larger study, administrators and teachers in the six experimental schools received professional development and coaching related to differentiation and were compared to the remaining three schools that received no professional development and coaching and who served as the comparison group.

Research Design

A subset of three schools from the nine schools included in the larger study were chosen for inclusion in this study. The study employed an ethnographic case study research design as it facilitated examination, analysis, and discussion of three distinct cases of principals and teachers involved in the process of learning and implementing differentiation to address their diverse learners' needs.

Sampling. Stratified purposeful sampling procedures guided the selection of the three schools and participating administrators and teachers; the three schools varied greatly from one another in terms of the principals' administrative leadership styles, stability and backgrounds of the teaching staff, and student demographics. The second level of sampling was the selection of one academic team at each grade level (approximately 12 teachers per building) who served as the participating teachers. Criteria for selection of the teams included racial and gender diversity and their

Table 1

Teacher Demographics

	Howard	Rockford	Greene
Gender			
Female	79%	68%	60%
Male	21%	32%	40%
Race/Ethnicity			
Caucasian	86%	80%	85%
African American	4%	9%	11%
Hispanic	3%	5%	2%
Asian/Pacific	5%	4%	2%
Native American	2%	2%	0%
Highest Degree			
Bachelor's	61%	76%	46%
Master's	25%	9%	36%
Unspecified/other	14%	15%	18%

collective willingness to participate in the 3-year study, including participation in professional development and monthly observations, interviews, and coaching sessions.

Participants. The study participants were the administrators and teachers in the subset of three middle schools who received a professional development and coaching treatment related to differentiated curriculum, instruction, and assessment. Of the four principals in the study, three were female, one male. All were Caucasian and had earned master's degrees. One principal earned a Ph.D. during the course of the study. As is common in education, the teachers were predominantly female and Caucasian. The majority in each school had earned a bachelor's degree as his or her highest credential. (See Table 1.)

Treatment. The treatment consisted of professional development and monthly individual coaching sessions designed to increase the teachers' knowledge and skills related to differentiating in the middle school classroom. Participants in the each of the schools received approximately three full days per year of professional development from national leaders in the area of differentiation for gifted students in the mixed-ability classroom. The professional development sessions focused on curriculum design and practical instructional and assessment strategies that facilitated the implementation of a student-centered classroom, responsive to students' diverse academic needs. Coaching sessions provided individualized intensive support based on the coach's assessment of the teacher's needs. Some examples of coaching sessions included curriculum

planning, material preparation, lesson review, analysis of students' pre- or posttest data to inform the teaching process, or review of available materials to determine the degree of fit for the learners and the lesson objectives.

Data Sources

Qualitative research can be strengthened by including a variety of methods collected in a variety of ways (Patton, 1990). This study incorporated several different qualitative data collection methods.

Coaches as Instruments. Three coaches (one in each school) worked with the schools and each generated voluminous field notes that described the schedules for the monthly visits, the coaching sessions, and the formal and informal conversations that occurred during each data collection visit. The criteria for selecting coaches for this study included: extensive knowledge of differentiated curriculum, instruction, and assessment; experience teaching or/ or serving as an administrator in diverse middle schools including schools in urban settings and with students from impoverished backgrounds; and advanced degrees in education. Additionally, coaches could not be employees of any of school districts involved in the study. Coaches were participant observers and fulfilled the additional roles of primary data source and interviewer. All three coaches in this study were European American; two coaches were female, one coach was male. Coaches accumulated significant "informational residue," the information details collected without intent that contributed to the overall picture of the research site (Lincoln & Guba, 1985). These coaches included personal, reflective comments, perceptions, ideas for future coaching sessions, and transcripts of informal interactions in their field journals.

Interview and Observation Protocols. Coaches used semistructured protocols to guide interviews and observations. Formal interviews with administrators occurred routinely throughout the study and on an as-needed basis to investigate emerging themes. Interviews lasted approximately 60 minutes per session. Informal interviews took place monthly during each coaching visit. Formal interviews with teachers occurred approximately nine times per year, approximately 30 minutes per session; informal interviews occurred frequently during coaching sessions. Interviews with teachers typically occurred just prior to or just following a formal classroom observation. Classroom observations were carefully documented so that researchers could systematically describe events and behaviors over time. Formal interviews were tape recorded and transcribed for attributional clarity. Informal interviews typically were not recorded but were carefully noted in coach field notes.

Secondary Data Sources. In some sites, focus groups of three to five students, including gifted students, served as secondary data sources to elaborate on emergent ideas. These tape-recorded sessions occurred approximately one time per year and were transcribed for later reference. Content analysis of lesson plans, teacher-generated assignments, and student work samples yielded supplemental insights into patterns of change over time and degree of teacher and student understanding of differentiated instruction and differentiated authentic assessment. Teacher reflective journals provided elaborative data and insights into teacher thought and teacher change regarding implementation of differentiated curriculum, instruction, and assessment.

Criteria for Trustworthiness

The postpositivist, naturalistic paradigm distinguishes itself from the scientific, positivist paradigm in the methods used to establish trustworthiness of inquiry. Lincoln and Guba (1985) suggested that trustworthiness can be established through credibility, transferability, dependability, and confirmability of research findings. These authors defined credibility as "activities in the field that increase the probability that credible findings and interpretations will be produced" (p. 301).

Prolonged Engagement. Extensive presence and involvement of coaches in the social setting being studied is necessary for understanding life in those settings from the perspective of those who inhabit the settings. Coaches were present at each of the research sites on a prolonged basis throughout the study, approximately one to two days per month over the study period. Researchers were technically "outsiders" while in the school setting, although they experienced the settings from the perspective of "insiders" through personally experiencing classroom events, observations, and talking with other participants (Patton, 1990).

Persistent Observation. Teachers were observed and interviewed repeatedly, over time, to identify and investigate specific phenomena of interest in greater depth. Further, purposeful observation scheduling allowed coaches to visit the same class periods over time in an attempt to understand the specific classroom dynamics, individual participants, and the environment.

Triangulation. Three methods of data triangulation were incorporated to strengthen the study and to increase the credibility of the findings. The use of multiple methods (interview transcripts, observation notes, document analysis) yielded a variety of data sources. For example, interview responses from students, teachers' instructional documents, and observation notes were triangulated to ascertain a more complete picture of the school and class-

room scenario. This triangulation of methods was used to see data from multiple perspectives and gain additional analytic insights. Secondly, a conscious decision to use different researchers for data collection (“coaches”) and data analysis (“researchers”) allowed multiple perspectives and reduced the possibility of coach bias from contaminating data analysis. Third, researchers triangulated theories and sought different perspectives from varying conceptual frameworks (Erickson, 1986; Glaser & Strauss, 1967; Patton, 1990; Strauss & Corbin, 1990).

Peer Debriefing. Researcher debriefing sessions occurred regularly throughout the data collection and analysis phases of the study. Coaches met monthly to debrief and discuss trends, issues, and scenarios relevant to each research site. (One of the three coaches was in a remote location and corresponded through e-mail and telephone conversations, sending field notes, instructional documents, photographs of student products, and other pertinent data through faxes and mail services.) Researchers posed questions to coaches to test preliminary theories and to shape the future direction for data collection. Researchers involved with data analysis met regularly to confirm and disconfirm preliminary theories, resolve coding dilemmas, check for individual biases, and to reframe individual perspectives.

Four neutral peer debriefers met individually and collectively with data analysts to ensure that emerging findings were firmly grounded in the data and to ensure that researcher bias did not threaten the study’s credibility. The four selected peer debriefers were advanced-level doctoral students at the same university as the researchers and possessed a range of public school experiences. Each had training and experience with qualitative research methods; several worked on other research projects. Each peer debriefer was provided with several transcripts of teacher and student interviews and/or classroom observations from the varied sites. Each was asked to examine emerging categories with regard to specific transcripts to ensure that the categories and themes were visible in the data. Approximately three individual meetings occurred between the researcher and each peer debriefer and four group meetings occurred with several peer debriefers, in pairs, or the peer debriefing team collectively.

Referential Adequacy. Observation and interview data were collected from field notes and taped (audio and/or video) sessions that were transcribed by a neutral transcriber. The transcripts were checked for accuracy and appropriate emphasis by researchers who listened to the tapes during analysis sessions. These tapes were occasionally referenced when individual researcher bias was questioned.

Data Analysis

The conceptual framework undergirding this study is symbolic interactionism; the belief that individuals assign meaning to shared experiences and interactions, such as those that occurred during the change process in three middle schools attempting to incorporate differentiation as a vehicle for addressing academic diversity. The ethnographic case study design was a fit as it facilitated the analysis of these interactions between administrators and teachers over a 3-year process.

Researchers followed analytic techniques suggested by Yin (1989) including careful readings of each data source, categorizing and recategorizing information into different arrays to glean unique insights, and making matrices of categories and placing evidence from original data sources within each category. As data were collected and analyzed simultaneously, researchers employed a constant comparative method of analysis, using insights from coach meetings and from peer debriefers to influence the direction of data analysis. The purpose of this phase of analysis was to identify common themes and patterns within each school and to note the types of typical interactions between the administrators and teachers. Researchers created reflexive memos that evolved into the final case descriptions for each of the three schools.

Results

Principals in the study sites varied widely in their support of the introduction of differentiation into their schools. Principals’ responses to differentiation ranged from highly positive verbal and behavioral support and participation to complete avoidance of interaction with differentiation coaches and the study as a whole. The level of a principal’s verbal and behavioral support of differentiation often had profound effects upon teachers’ implementation of differentiation in their classrooms.

Case studies of principals from three participating middle schools illustrate the range of principal response to differentiation and illuminate factors that contributed to or inhibited teachers’ willingness and ability to implement differentiation of instruction and assessment.

Strong Principal Support: Howard Middle School¹

Howard Middle School is located in a middle-class neighborhood in the suburbs of a large mid-Atlantic city. Howard serves a predominantly middle to upper middle class population of students. The school had a relatively

stable teaching faculty, and teachers and students seemed both satisfied with and proud of their school.

Throughout the three years of the study, the principal of Howard Middle School, Eric Waters, demonstrated consistent support of differentiation, both verbally and through his actions. Waters attended—and was an active, positive, and participatory presence in—all staff development meetings on differentiation. His conversations with researchers and teachers as well as his behaviors showed that he approached the initiative as an opportunity for the whole school—himself included—to learn and grow as educators. Waters believed that a school should be a genuine learning community in which teachers as well as students are regarded and regard themselves as learners. Waters was confident that Howard was just such a community. At the end of the meeting, Eric drew attention to a phrase he had written at the bottom of the agenda. It read, “An effective school is one in which the teachers continue to learn.” He told the group that if that phrase were in the dictionary, the pictures of Howard’s faculty would be presented beside it. (Howard Observer Journal, YS, #6, p. 1)

Waters also repeatedly emphasized in staff development meetings that the change process, while necessary to maintaining a healthy, effective school, was often difficult and challenging. “Some days it’s going to feel better than others. Some days it will just feel like a failure, but you’ll keep trying because this is the right thing” (Howard Observer Journal, Y2, #6, p. 3).

When the differentiation coach interviewed Howard teachers, she often heard echoes of Waters’ words:

I want to be a differentiated teacher, I want to do all this stuff, but I’ve also got to get everything else done. I know I can reach that particular goal, but I know it’s going to happen slowly. I know this is going to be a hard year for it to happen, and I just have to accept those things. But that is a goal—to try and do more and more of it—because I really do like it. (Howard Teacher Interview, Y3, #12, p. 8)

Beyond simply vocalizing support for his teachers during the messy change process, Waters also routinely and publicly stood by the instructional decisions of his staff members. Knowing that they were “protected” by Waters,

teachers at Howard were comfortable taking the types of risks in the classroom that differentiation entails. They were confident that, even if a lesson flopped, they would have the support of their principal. As the Howard coach observed, the teachers sensed in Eric both a leader and a colleague.

Eric had the image of, “he is our leader and we are behind him, and it is collegial. He is the principal and he is the leader, but he is part of the team as well.” He constantly lets them know that he appreciates them. (Howard Observer Exit Interview, Y3, #1, pp. 5–6)

Throughout the study, Waters remained unfailingly positive about both the importance of differentiation and his faculty’s ability to implement it. However, Waters’ support went beyond mere words; his actions also clearly communicated his commitment to differentiation. Waters routinely met with and talked to teachers about their efforts to differentiate, visited classrooms to observe differentiated lessons, and provided planning time for teachers who were involved in differentiating curriculum, instruction, and assessments. Waters was also realistic about how much growth to expect from teachers, understanding that successful implementation of differentiation develops over time. Waters allowed teachers room to experiment, make errors, and make their own decisions about what happened in their classrooms.

As a result of Waters’ strong leadership, Howard teachers, as a group, were the most willing to participate in the study of all of the faculties included in the study.

I think he encourages them . . . when they are tired and beat and don’t feel like they can do it anymore, they think, we’ve got to keep going because we cannot let the team down. They’re thinking, “Eric would want us to do this.” It’s not, “If we don’t, Eric will kill us.” (Howard Observer Interview, Y3, #1, p. 6)

Through his hands-on, supportive approach to leadership, Waters created a “safe environment” for experimentation, positively influencing teachers’ willingness to make changes in their classroom practices. Waters’ consistent verbal and behavioral support of his faculty, coupled with his belief in good teaching as a process of on-going learning and risk-taking, provided Howard teachers with a safety net that allowed them to make significant strides with differentiating curriculum, instruction, and assessment.

Weak Administrator Support: The Principals at Greene Middle School

At the beginning of the study, Greene Middle School appeared to be an ideal setting in which to attempt the implementation of differentiation. Greene had a stable school environment, well-behaved students and hard-working teachers, and a self-proclaimed desire to be innovative. However, Greene Middle School was in reality fairly resistant to participating in the study. Resistance at Greene was more subtle and polite than in the other resistant school, but the end result was the same: few Greene Middle School teachers made any efforts even to attempt differentiating curriculum, instruction, or assessment.

Greene had two principals over the course of the study. The first principal, Gina Parks, was similar to Howard's principal, Eric Waters, in her enthusiasm for the study and her success in enlisting and encouraging the participation of teachers. Because Parks gave great attention and status to the study, Greene teachers were initially enthusiastic about participating. During the first year of the study, many teachers were making small but consistent attempts at differentiating instruction and appeared to be on board with the initiative. Like the principal at Howard, Parks made a point of attending staff development sessions, following up with her teachers, and communicating the importance of differentiation for student academic and socio-emotional growth.

At the end of the first year of the study, however, Parks left and was replaced by Linda Walker. The principal change brought with it several complications for the study. A significant number of teachers initially participating in the study left the school after the principal change. Furthermore, Walker was less devoted to the idea of differentiation than Parks had been. Walker was much more focused on making sure that teachers were implementing another initiative, interdisciplinary instruction, and routinely conducting high-stakes observations of teachers' classrooms. Walker was unable to see, and consequently was unable to help her teachers see, the relationship between interdisciplinary instruction and differentiation.

While Walker expressed *verbal* support of differentiation, her *behavior* clearly indicated that she did not consider it a high priority; she seemed more interested in cultivating the *appearance* of integrating differentiation into her school than in actual change. She did little to help the coach gain access to teachers and did not encourage her teachers to participate in the study. The coach at the school recorded:

I have been very frustrated with my dealings with Walker, principal of Greene. She professes great interest in and support for differentiation in her school, and has made changes to make sure that all teachers at Greene are aware of and use differentiation to some degree. At the same time, she rarely returns phone calls or provides needed information despite my efforts to be flexible and understanding of her busy schedule and to make my needs clear and minimal. Teachers have varied from enthusiastic to completely uncooperative, and there is neither reward nor consequence for their behavior. (Greene Observer Journal, Y3, #1, p. 1)

Unlike Parks, Walker did not attend staff development meetings on differentiation, and although she and other administrators routinely conducted observations of teachers' classrooms, the observation sheet did not ask observers to look for evidence of differentiated curriculum, instruction, or assessment, sending the clear message to teachers that differentiation was no longer an instructional priority at Greene.

Because it was clear to Greene teachers that their principal did not place a high value on differentiation and because teachers were already contending with the pressures of high-stakes observations and interdisciplinary teaching, they did not feel comfortable taking the risks associated with beginning to differentiate instruction. Many of the teachers expressed the feeling that as differentiation was not the highest priority in their administrators' minds, it was, therefore, in their best interest to focus their energies on what was most important. One teacher told her coach, "I am pulled in many directions by many chiefs, and you won't often be the top chief pulling" (Greene Teacher Interview, Y2, #3, p. 4).

Teachers at Greene reflected the same attitudes about differentiation as their principal: While they verbally acknowledged the importance of differentiation, their behavior did not reflect a strong commitment to the initiative. That is, although many Greene teachers professed a belief that differentiation was important, few of the teachers actually tried to implement even a single differentiated activity. Greene teachers felt that their school's reputation as the best in the district brought with it an immense amount of pressure and responsibility for themselves as teachers. As a result, they were unable to see beyond the many pressures that they faced every day to make room for differentiation: "I'm so busy and it takes so much time to plan for differentiation and they are having me do so many things. I got it and I would love to do it and I will do it—tomorrow. You know what I mean?" (Greene Teacher Interview, Y3, #3, p. 5).

As a result of the principal's low prioritization of the study and the multiple pressures with which Greene teachers felt that they were contending, Greene teachers made few strides toward integrating differentiation into their classrooms:

Teachers did not know that I would be observing today, and no classes were using differentiated lessons. This is telling in itself. We have not made sufficient progress with any of our teachers to see differentiation as the rule rather than the exception. (Greene Observer Journal, Y3, #1, p. 3)

Although the faculty at Greene expressed a belief that differentiation was an important instructional approach, in the end, none of the Greene Middle School teachers had made any significant progress with differentiation.

Administrator Sabotage: Rockford Middle School

Rockford Middle School was located on the outskirts of an urban area and served students from primarily minority and low-income households. Administrators, teachers, and students alike characterized the school as "troubled" (Rockford Teacher Interview, Y2, #8, p. 7) and "tough" (Rockford Student Interview, Y1, #11, p. 1). Ellen Dodge, Rockford Middle School's principal, held the reins of power tightly in her school, giving teachers little decision-making power in their classrooms or in any aspect of the school. Teachers felt that her tendency to clamp down tightly on them was exacerbated by the fact that she was inconsistent in her exercise of power. She maintained an equally inconsistent relationship with the study, offering her assistance and support at one moment, and then telling teachers that they should only pretend to participate in the study in the presence of the coach. "I am struck by how different she can be at different times. She is so cold and aloof one minute, and then all smiles and helpfulness the next" (Rockford Observer Field Notes, Y3, #1, p. 1). The principal not only avoided attending staff development meetings, but she often did not show up for scheduled meetings with the coach, did not follow through with promises that she made to the coach, and did not inform teachers about when the coach was scheduled to visit.

The eighth-grade team meeting was even less productive than the seventh-grade meeting. They really have no input or questions. . . . They had not been told about the meeting by the principal. They did not know about the in-service day we had planned, and after being told, Sue and Beth indi-

cated that they would not be there. . . . Kim did not say anything. Beth indicated that they really needed to go and help set up some "social event that was happening after school that day. I left." (Rockford Observer Field Notes, Y3, #6, pp. 3–4)

Furthermore, teachers at Rockford perceived Dodge as an ineffective leader, unable to control the student body and unable to lead and support teachers. Teachers believed that Dodge's ineffectiveness was a major contributing factor to the school's larger problems: "Teachers continued to express their frustration and anger over students disrupting classes and about the continuing changes in administration at the school. They also spoke about the seeming powerlessness of the administration to manage the school" (Rockford Coach Field Notes, Y3 Summary, p. 1).

In turn, Dodge frequently characterized the school's teachers as inexperienced, incompetent, and unable to control students effectively. She believed that effective, experienced teachers would not accept a job in a troubled school such as hers.

Dodge told how most teachers quickly leave Rockford because of the taxing requirements of its clientele. She spoke of presently working through the system to fire a new teacher before the year was over because of the teacher's incompetence. The teacher had been hired because of the limited number of qualified candidates willing to teach at Rockford. She described Rockford's faculty as inexperienced teachers who give the school energy, but who do not have the experience required to manage and educate an "at-risk" population. (Rockford Coach Journal, Y2, #2, p. 1)

Clearly, Rockford's school environment was a turbulent one in which the relationships between the administration, teachers, and students were tense and unrelieved by effective communication or mutual respect. As a result, school members' energies were focused on day-to-day, immediate "getting by" concerns. In Rockford's environment, where basic survival was the primary concern of most of the school's members, school was a place of struggle, struggles that many school members felt they were losing. When Rockford's coach asked teachers and students to give a metaphor to describe their school experiences, she received these responses:

In her last interview for '97–'98, Meiners described teaching as a garden. When I asked her to elaborate, she told how her garden was contin-

ually pounded by forces outside of her control. In the metaphor, she perceived herself as one of the plants in the garden. . . . Hibbard described teaching as a war. She then narrowed the metaphor to say that it was the Vietnam War. Teachers were winning some battles for the minds and hearts of students, but ultimately the war would be lost. . . . The teachers are not the only ones feeling the stress in Rockford's environment. The students are also being impacted and recognize the deteriorating conditions. In interviews, students gave the metaphors of "a jungle" and "a swamp" as descriptive of their school. (Rockford Coach Field Notes, Y2, Summary, p. 4)

As a result of these stressful conditions, many teachers at Rockford perceived themselves as caught between an administration that rendered them powerless and unsupported, and a student body that was difficult to manage and even antagonistic. Under these threats, teachers expressed that they were finding themselves growing less willing to devote the extra time and effort necessary to effect the types of changes they would like to see:

Ms. Swanson was anxious to express concern that during the last school year she had not been her best at teaching. . . . She said she felt like a missionary in her present position and was ready to just be a teacher. Swanson appears to desire professional growth and wishes to find a means to settle the troubles at Rockford. She seems to be cornered, though. She says that her ability and desire to take the risks of change is strangled by the day-to-day battles of low teacher morale, ineffective administrators, and unmanaged students. (Rockford Coach Journal, Y2, #4, pp. 1–2)

For teachers at Rockford, attempting to differentiate instruction was perceived as just another burden that they had to bear. School staff members felt that most of their energies were devoted to attending to the needs of their student population—often, needs unrelated to academic issues—which made attempting to differentiate instruction a near impossibility, in their view:

Saunders wasn't able to interview today. . . . A parent conference interfered with our scheduled time. During the parent conference, I saw Saunders in the hall . . . she said, "I'll be glad as hell when this day is over." The child of the parent she was conferencing with had failed sixth grade

last year because of 150 plus days of absences. Today, while I was observing Saunders, the school system's visiting teacher escorted the girl into the room. The student was being returned to school on a court order because this year she had already missed 70 days of school. (Rockford Coach Journal, Y3, #8, pp. 1–2)

Teachers did not recognize differentiation as relevant to the deeper issues of poverty and student discipline with which their school was contending, and their principal's blatant dismissal of differentiation did nothing to encourage them to wrestle with the ways in which differentiation might benefit their students. As a result, many of the teachers at Rockford were very vocal in protesting against being asked to differentiate curriculum, instruction, and assessment.

Ms. Lowery, a sixth grade teacher, led the effort to keep differentiation out of Rockford. On Friday, when we discussed why she had not wanted differentiation in the school, Lowery implied that she just didn't believe that any university people could come into their school and offer a means to effectively deal with Rockford's broader issues. Furthermore, she did not want the additional burden of "others" being a part of her school day. I think she is simply overwhelmed with her daily existence at the school. (Rockford Coach Field Notes, Y2 Summary, p. 3)

Rockford teachers felt largely unsupported by the administration in their efforts to effect change in their classrooms and in the school and were discouraged by the low achievement and motivation of their students. Rockford teachers seemed to perceive their school as unprepared for taking the risks associated with change. Instead, they believed that their focus—and the school's—needed to be on meeting basic needs such as safety, social, and behavioral needs, and did not see how differentiation was related to the fulfilling of these needs. As a result, most teachers were highly resistant—both verbally and in terms of their actions—to the idea of differentiation.

In the absence of administrator support of the initiative—indeed, in the face of messages from the principal that they need only fake participation in the study—it is little wonder that few teachers at Rockford worked with any great consistency or success toward using differentiation in their classrooms. Although the coach at Rockford did manage to enlist the efforts of a few Rockford teachers, she could not fully break through the general atmosphere

of apathy and expectation of mediocrity—from teachers, administrators, and students—that plagued Rockford, a tone that seemed to be set in large part by the principal.

Discussion

From these case studies of three principals, several important themes regarding a principal's impact on teachers' willingness and ability to differentiate instruction emerged.

1. Teachers' responses to being asked to differentiate mirrored those of their principals. Teachers in the study seemed to be very perceptive about how highly their principals prioritized differentiation and responded accordingly. At Howard Middle School, where the principal showed strong support of differentiation both in his words and through his actions, teachers likewise showed verbal buy-in along with strong efforts to implement differentiation in their classrooms. Howard Middle School had the largest number of teachers attempting to differentiate instruction of the three schools in the study. At Greene Middle School, where the principal expressed her belief in differentiation but did little to promote the initiative at her school, teachers spoke enthusiastically about the value of and need for differentiation, but made few attempts at implementing it in their classrooms. Finally, Rockford teachers, led by an administrator who showed neither verbal nor behavioral support of differentiation, were vocal about their dismissal of it and largely refused to try it in their classrooms.

Interestingly, the faculty at each of these schools had varying degrees of respect for their principals—at Howard, respect for Eric Waters was high; at Greene, teachers had mixed responses to Linda Walker; and at Rockford, teachers largely were unhappy with Ellen Dodge. However, a faculty's level of respect for its principal did not seem to impact how closely teachers' responses to differentiation mirrored their principal's response. In each of the schools, the majority of the teachers took their administrator's lead in determining the amount of effort they would put into making differentiation a part of their classrooms.

2. Teachers needed administrator support—both in terms of resources and emotional support—to feel comfortable with differentiating curriculum, instruction, and assessment. Our study's findings indicated that attempting to differentiate felt like a large risk to many teachers. Differentiation is a complex and difficult teaching approach that challenges many teachers' conceptions of teaching and learning (Tomlinson, 2001). Teachers tend to perceive differentiation as overwhelming initially, believing that it takes a great deal of time to plan and implement and recognizing that

it requires new and complex classroom management skills (Brighton et al., 2005). Teachers engaged in the process of integrating differentiation into their classroom practices need a great deal of support, including extra planning time, resources, and understanding of the difficulty of what they are attempting (Hertberg & Brighton, 2005). Many teachers in this study expressed feeling stretched outside of their comfort zones by differentiation. Eric Waters, the principal at Howard, made his teachers feel comfortable taking the risks that differentiation entails by clearly communicating to teachers that he recognized and understood the difficulties involved in differentiation, held realistic expectations for teacher growth, and understood that learning to differentiate takes time. Most importantly, Waters backed up his words with actions, allowing differentiating teachers extra planning time, observing differentiated lessons, and providing constructive feedback.

3. Effective implementation of differentiation required an administrator with both the desire to see change occur and the belief that change was possible. Findings from the study clearly indicated that differentiation was most successful in schools with administrators who truly desired the change and believed that the school was capable of success with the change. At Howard, where the initiative was the most successful, the principal believed that differentiation would make a positive difference for the students in his school, and expressed continually the belief that his teachers were capable of developing the skills and knowledge necessary for implementing differentiation in their classrooms. Greene's principal, Linda Walker, seemed to believe that her teachers were capable of implementing differentiation, but did not seem to truly value it as an instructional approach. Linda Walker seemed content that her school was doing fine as it was, and did not seem to believe that this change would make a difference for her students. As such, she did not prioritize the initiative. Rockford's principal seemed to doubt that her teachers would be able to tackle this difficult initiative and did not seem convinced that differentiation was appropriate, given the larger issues that Rockford was facing. Her combined lack of belief in her teachers' ability to be successful with differentiation and her doubts about the relevance of differentiation to her school population contributed to the failure of the initiative at her school.

This study's findings resonate with Sternberg's (2000) theory of modifiability, which suggests schools must be considered modifiable, or able to withstand change, prior to embarking upon a change journey. The theory posits that there are two kinds of change—surface structural change, or seeking merely the appearance of change, and deep structural change, which often necessitates that

schools reconsider and often rebuild the organizational structures in the school.

4. *Encouraging teachers to differentiate instruction in any systematic way required administrators to have focus and long-term vision.* Teachers in the study who were facing multiple change initiatives seemed to struggle with trying to attend to what they regarded as competing pulls on their time. Rather than try to find ways in which the initiatives overlapped or meshed, teachers tended to view them as separate and conflicting. At Greene, where teachers were struggling with the complexities of interdisciplinary teaching, teachers felt overwhelmed by the idea of integrating differentiation into these practices. At Howard, the principal was conscious of the need to limit and focus staff development initiatives so that teachers had the time to consider, wrestle and experiment with, and master instructional approaches. Waters' long-term vision for differentiation sent two clear messages to teachers that encouraged them to get on board with the initiative: (a) We are here to support you, and (b) we as a school are committed to this approach to education.

In summary, the principals in this study had a large impact on teachers' willingness and ability to differentiate curriculum, instruction, and assessment. Principals seemed to be a key factor in teachers' success with implementing differentiation in their classrooms. The study's findings indicated that administrators effective in encouraging their staff to implement differentiation: (a) worked toward and maintained healthy school environments in which teachers and students felt safe and secure prior to introducing initiatives; (b) held high but realistic expectations for their teachers and students and believed that change was possible in their schools; (c) believed that real change—not just the appearance of change—was a necessity in maintaining the health and effectiveness of a school and faculty; (d) were instructional leaders, understood general pedagogy, and participated in in-services to gain knowledge about differentiation; (e) did not overburden teachers with multiple change initiatives; and (f) supported teachers in the change process.

Implications and Recommendations for Policy

The results of this study indicate that one of the keys to a successful differentiation initiative was the principal's commitment to the initiative. Teachers tended to take their cues about how to respond to differentiation from their principals. Principals who communicated passion for differentiation tended to have faculties who responded positively to the initiative and who made visible changes to

their teaching practices that were consonant with differentiation. Therefore, it is important to generate buy-in from and enthusiasm in principals prior to introducing a differentiation initiative to a faculty. Training for administrators in differentiation should focus on developing administrator buy-in to the initiative by emphasizing the urgency of providing appropriate services for a wide range of learners, including those who are gifted.

Administrator support of teachers during the differentiation process, along with administrator understanding of differentiation itself, impacted teacher success with the initiative. Administrator training in differentiation should precede teacher training, but administrators should continue to learn about differentiation alongside their teachers during staff development sessions. Administrator training in differentiation should include information on the substance of differentiation to allow administrators to act as knowledgeable leaders, as well as information on appropriate methods of coaching and supporting teachers who are in the process of learning to differentiate curriculum, instruction, and assessment. Additionally, when seemingly conflicting initiatives are in play within one school, administrators should carefully outline and consistently articulate how the initiatives are mutually reinforcing and supportive of the larger goal of addressing a broad range of learners' needs, including those of the gifted.

Alone, differentiation of instruction will not "fix" troubled schools. Leaders should assess the readiness of a school for change prior to attempting to implement a change initiative such as differentiation. After a thorough assessment of the school's degree of modifiability, those schools determined to have structural or organizational imbalances should address those fully and through that process ascertain from stakeholders their willingness and capacity to embrace the differentiation initiative. Simultaneously tackling both the features of the troubled school and differentiation are likely to yield failure on both counts. However, with an informed and passionate administrator, a school culture ready for and committed to change, and a steady focus on gaining teachers' buy-in and supporting them through the tricky change process, differentiation of curriculum, instruction, and assessment to meet the needs of a broad range of learners can become a reality in our nation's classrooms.

Areas for Further Research

This study examined schools in the early stages of considering and implementing differentiation of instruction. Major foci of principals in these early stages were

garnering teacher support and buy-in of differentiation and establishing a school culture that was welcoming to change. As systematic change reforms focused on differentiated instruction are relatively new in most schools, future research on principals' influence on sustaining differentiated instruction as a focus and a priority in classrooms would add to our knowledge of how best to support and develop teachers' expertise in differentiation over time.

Additionally, questions remain regarding the impact of policy on principals' prioritization of differentiation of curriculum, instruction, and assessment in the classroom. Further research is needed on whether and how principals integrate an emphasis on differentiation into seemingly conflicting high-stakes policy mandates such as the No Child Left Behind Act of 2001.

References

- Allan, S. D. (1991). Ability grouping research reviews: What do they say about grouping and the gifted? *Educational Leadership*, 48(6), 60–65.
- Bandura, A. (1977). *Social learning theory*. Englewood Cliffs, NJ: Prentice Hall.
- Berliner, D. (1988). *The development of expertise in pedagogy*. Washington, DC: American Association of Colleges for Teacher Education. (ERIC Document Reproduction Service No. ED298122)
- Bloomer, M. (2001). Young lives, learning and transformation: Some theoretical considerations. *Oxford Review of Education*, 27, 429–449.
- Brighton, C. M. (2001). *Internal factors that influence teacher change: Teachers' beliefs and conceptions*. Unpublished doctoral dissertation, University of Virginia, Charlottesville.
- Brighton, C., Hertberg, H., Callahan, C., Tomlinson, C., & Moon, T. (2005). *The feasibility of high-end learning in a diverse middle school* (Research Monograph 05210). Storrs, CT: National Research Center on the Gifted and Talented.
- Eccles, J. S. & Wigfield, A. (1997). *Young adolescent development*. Columbus, OH: National Middle School Association. (ERIC Document Reproduction Service No. ED427847)
- Elmore, R., Peterson, P., & McCarthy, S. (1996). *Restructuring in the classroom: Teaching, learning and school organization*. San Francisco: Jossey-Bass.
- Erickson, F. (1986). Qualitative methods in research on teaching. In M. Wittrock (Ed.), *Handbook on research in teaching* (3rd ed., pp. 119–161). New York: Macmillan.
- Fletcher, T. V., Bos, C. S., & Johnson, L. M. (1999). Accommodating English language learners with language and learning disabilities in the general education classroom. *Learning Disabilities: Research and Practice*, 14, 80–91.
- Fullan, M. (1991). *The new meaning of educational change* (2nd ed.). New York: Teachers College.
- Fullan, M. (1993). *Change forces: Probing the depths of educational change*. London: Falmer.
- George, P. S., & Alexander, W. N. (1993). *The exemplary middle school* (2nd ed.). Fort Worth: Harcourt Brace Jovanovich.
- Glaser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory: Strategies for qualitative research*. New York: Aldine DeGruyter.
- Gold, B. A. (1999). Punctuated legitimacy: A theory of teacher change. *Teachers College Record*, 101, 192–219.
- Hall, G. E. (1985, April). *A stages of concern approach to teacher preparation*. Paper presented at the annual meeting of the American Educational Research Association, Chicago. (ERIC Document Reproduction Service No. ED265126)
- Hertberg, H. L. (2003). *The influence of training on eighth grade writing instructors' responses to the needs of advanced writers*. Unpublished doctoral dissertation, University of Virginia, Charlottesville.
- Hertberg, H. L., & Brighton, C. M. (2005). Room to improve. *Journal of Staff Development*, 26(4), 42–47.
- Jenkins, J., Jewell, M., Leicester, N., O'Connor, R. E., Jenkins, L., & Troutner, N. M. (1992). Accommodations for individual differences without classroom ability groups: An experiment in school restructuring. *Exceptional Children*, 60, 344–359.
- Kulik, J. A., & Kulik, C. C. (1992). Meta-analytic findings on grouping programs. *Gifted Child Quarterly*, 36, 73–77.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Beverly Hills: Sage.
- McEwin, K. C., Dickinson, T. S., & Jenkins, D. M. (1996). *America's middle schools: Practices and progress. A 25-year perspective*. Columbus, OH: National Middle School Association. (ERIC Document Reproduction Service No. ED396842)
- Moon, T. R., Brighton, C. M., & Callahan, C. M. (2003). The influences of state testing programs on elementary teachers and students. *Roeper Review*, 25, 49–60.
- Moon, T. R., Callahan, C. M., Brighton, C. M., Hertberg, H. L., Tomlinson, C. A., & Esperat, A. (2004). School characteristics inventory: Investigation of a quantitative instrument for measuring the modifiability of

- school contexts for implementation of educational innovations. *Journal for the Education of the Gifted*, 27, 177–206.
- Moon, T. R., Callahan, C. M., Tomlinson, C. A., & Miller, E. M. (2002). Middle school classrooms: Teachers' reported practices and students' perceptions. *NAGC Research Briefs*. Washington, DC: National Association for Gifted Children.
- Moon, T. R., Tomlinson, C. A., & Callahan, C. M. (1995). *Academic diversity in the middle school: Results from a national survey of middle school administrators and teachers* (Research Monograph No. 95124). Storrs, CT: National Research Center on the Gifted and Talented.
- National Center for Education Statistics. (1996). *Profile of children in U.S. School Districts* (NCES 96–831). Retrieved October 25, 2005, from <http://nces.ed.gov/pubs/96831.pdf>
- National Middle School Association and National Association for Gifted Children. (2005, January). *Meeting the needs of high-ability and high-potential learners in the middle grades*. (Joint Position Statement). Retrieved November 18, 2005, from <http://www.nmsa.org/AboutNMSA/PositionStatements/GiftedChildren/tabid/1119/Default.aspx>
- Oakes, J. (1985). *Keeping track*. New Haven: Yale University Press.
- Pate, P. E., Homestead, E. R., & McGinnis, K. L. (1997). *Making integrated curriculum work: Teachers, students, and the quest for coherent curriculum*. New York: Teachers College Press.
- Patton, M. Q. (1990). *Qualitative evaluation and research methods* (2nd ed.). Newbury Park, CA: Sage.
- Rogers, K. B. (1993). Grouping the gifted and talented. *Roeper Review*, 16, 8–12.
- Slavin, R. E. (1990). Achievement effects of ability grouping in secondary schools: A best evidence synthesis. *Review of Educational Research*, 60, 471–499.
- Steiner, L. (2000). *Comprehensive school reform: A review of the research literature on scaling up in education*. North Central Regional Educational Laboratory. Retrieved November 3, 2005, from <http://www.ncrel.org/csri/resources/scaling/review.htm>
- Sternberg, R. J. (2000). *Making school reform work: A "mineralogical" theory of school modifiability*. Bloomington, IN: Phi Delta Kappa Educational Foundation.
- Strauss, A. L., & Corbin, J. (1990). *Basics of qualitative research: Grounded theory procedures and techniques*. Newbury Park, CA: Sage.
- Tomlinson, C. A. (1995). *Gifted learners and the middle school: Problem or promise?* Reston, VA: Council for Exceptional Children. (ERIC Reproduction Service No. ED386832)
- Tomlinson, C. A. (2001). *How to differentiate instruction in mixed-ability classrooms* (2nd ed.). Alexandria, VA: Association for Supervision and Curriculum Development.
- Tyack, D., & Cuban, L. (1995). *Tinkering toward utopia: A century of public school reform*. Cambridge: Harvard University.
- Yin, R. K. (1989). *Case study research: Design and methods*. Newbury Park, CA: Sage.

Author Note

Research for these materials was supported under the Javits Act Program (Grant No. R206R000001) as administered by the Office of Educational Research and Improvement, U.S. Department of Education. Grantees undertaking such projects are encouraged to express freely their professional judgment. These materials, therefore, do not necessarily represent positions or policies of the Government, and no official endorsement should be inferred.

End Note

- ¹ School and employee names have been changed.